

**REMARKS**

Reconsideration and withdrawal of the rejections of the application are respectfully requested in view of the following remarks.

**I. STATUS OF THE CLAIMS AND FORMAL MATTERS.**

Claims 1-15 are pending in this application. Claims 7 and 9-15 have been withdrawn from consideration. Claims 1 and 9 are independent.

It is submitted that the claims are patentably distinct over the prior art cited in the Office Action, and that these claims are in full compliance with the requirements of 35 U.S.C. § 112.

**II. THE 35 U.S.C. §103(a) REJECTION HAS BEEN OVERCOME**

Claims 1-6 and 8 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 6,470,944 to Billings et al. (hereinafter, merely “Billings”) in view of U.S. U.S. Patent No. 6,428,874 to McGahern et al. (hereinafter, merely “McGahern”) and further in view of US 2002/0102894 to Hansen (hereinafter, merely “Hansen”).

Claim 1 recites, *inter alia*:

“A single facer corrugator belt in combination with a corrugator machine, said belt comprising:

... a polymeric resin layer applied to at least one surface of said base structure; and a plurality of grooves formed in said polymeric resin layer.” (emphasis added)

As to Billings, it relates to an unlaminated belt for a single-facer section of a corrugated board production line having a single base structure in the form of an endless loop. One or more layers of staple fiber material are needled into the outside of the base structure, extending partly therethrough, and forming a layer on the outside of the base structure. The base structure, once

so needled, is impregnated with a polymeric resin material. The Examiner acknowledges that Billings does not teach a groove coated corrugator belt. Additionally, Billings indicates that it prefers complete impregnation of the coating or polymeric resin material into the needled base structure 52 rather than a distinct layer on the outside 58 of the base structure. *Billings*, col. 4, lines 42-47.

As to MacGahern, it relates to a resin-impregnated endless belt for a long nip press of the shoe type having a base structure impregnated by a polymeric resin material which renders the belt impermeable to fluids, such as oil, water and air. The polymeric resin material forms layers on the inner and outer sides of the base structure. The inner layer is smooth, but the outer layer has primary grooves for the temporary storage of water pressed from a paper web. Therefore, the primary purpose of grooves in McGahern is to for the temporary storage of water pressed from a paper web.

On the contrary, grooves are provided on the outer surface of the belt according to the instant invention in order to a) ease sheet release and b) to increase the rate of board moisture removal. The coated sheet contacting surface of the instant invention is vented either with grooves or holes in order to allow moisture laden air to escape to the atmosphere and not to temporarily store water pressed from a web. There is no requirement or need for "temporary storage" in the instant invention.

As to Hansen, which the Examiner terms as to "providing the missing link" between Billings and McGahern, firstly does not teach or disclose the use of a coating. Secondly, the grooves formed therein are formed on the yarns of the fabric and not on an additional polymeric resin layer coated over the fabric. One or both of the upper and lower surfaces of the monofilament yarn may be provided with grooves for the temporary storage of water. *Hansen*, ¶

0021. Again, the Applicants would like to underscore that Hansen's yarns are provided with passages for conveying water away from or dewatering a cellulosic fibrous web and not to either a) ease sheet release or b) increase the rate of board moisture removal from a board being formed on a corrugator belt, as in the instant invention.

With reference to the Examiner's response to the Applicants' arguments, Applicants submit that the paragraphs that the Examiner looks to for support or the relied upon portions in Hansen are 15, 21 and 52. Applicants submit that in paragraph 15, reference is made to a fabric used as a part of a corrugator belt. When referring to dewatering, Applicants would like to point out that Hansen refers to "other industrial settings" and not corrugator belts. Relied upon portion, paragraph 21 of Hansen talks of the use of grooved yarns with no application mentioned. The only grooved yarns are shown in Figure 6 and in paragraph 54, which discusses Figure 6, wherein the grooves are stated to provide for storage of water from a cellulosic fibrous web. In other words, the grooves are used during papermaking and not in corrugator board production. Similarly, in paragraph 52 (and 53) of Hansen, when referring to the holes in the yarn for water storage, it is water from a cellulosic fibrous web. Again, this is papermaking and not in corrugator board production. Accordingly, Applicants respectfully submit that there is no teaching in Hansen for using such yarns, grooved or perforated, in a corrugator belt. Simply said, as far as corrugator belts are concerned, the yarns Hansen refers to are for reinforcing yarns and not dewatering yarns. Either way other than grooves and voids in yarns for a base support structure none of Hansen's teaching are for grooves in a coated corrugator belt sheet contact surface.

Since Hansen fails to provide the "missing link" for the reasons discussed above, Applicants respectfully submit that Billings and McGahern are not combinable.

Therefore, Applicants submit that independent claim 1 is patentable and respectfully request the withdrawal of the rejection.

### **III. OBVIOUSNESS-TYPE DOUBLE PATENTING REJECTION**

Claims 1-6 and 8 were rejected under the judicially-created doctrine of obviousness-type double patenting as allegedly being unpatentable over claim 1-19 of Billings in view of McGahern and further in view of Hansen.

For at least the reasons discussed above, Applicants submit that the obviousness-type double patenting rejection must also fail.

Consequently, reconsideration and withdrawal of the provisional obviousness-type double patenting rejection are respectfully requested.

### **IV. DEPENDENT CLAIMS**

The other claims are dependent from one of the independent claims, discussed above, and are therefore believed patentable for at least the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

### **CONCLUSION**

In the event the Examiner disagrees with any of statements appearing above with respect to the disclosure in the cited reference or references, it is respectfully requested that the

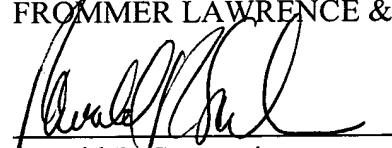
Examiner specifically indicate those portions of the reference or references, providing the basis for a contrary view.

In view of the foregoing amendments and remarks, it is believed that all of the claims in this application are patentable and Applicant respectfully requests early passage to issue of the present application.

Please charge any additional fees that may be needed, and credit any overpayment, to our Deposit Account No. 50-0320.

Respectfully submitted,  
FROMMERM LAWRENCE & HAUG LLP

By:

  
Ronald R. Santucci  
Reg. No. 28,988  
(212) 588-0800